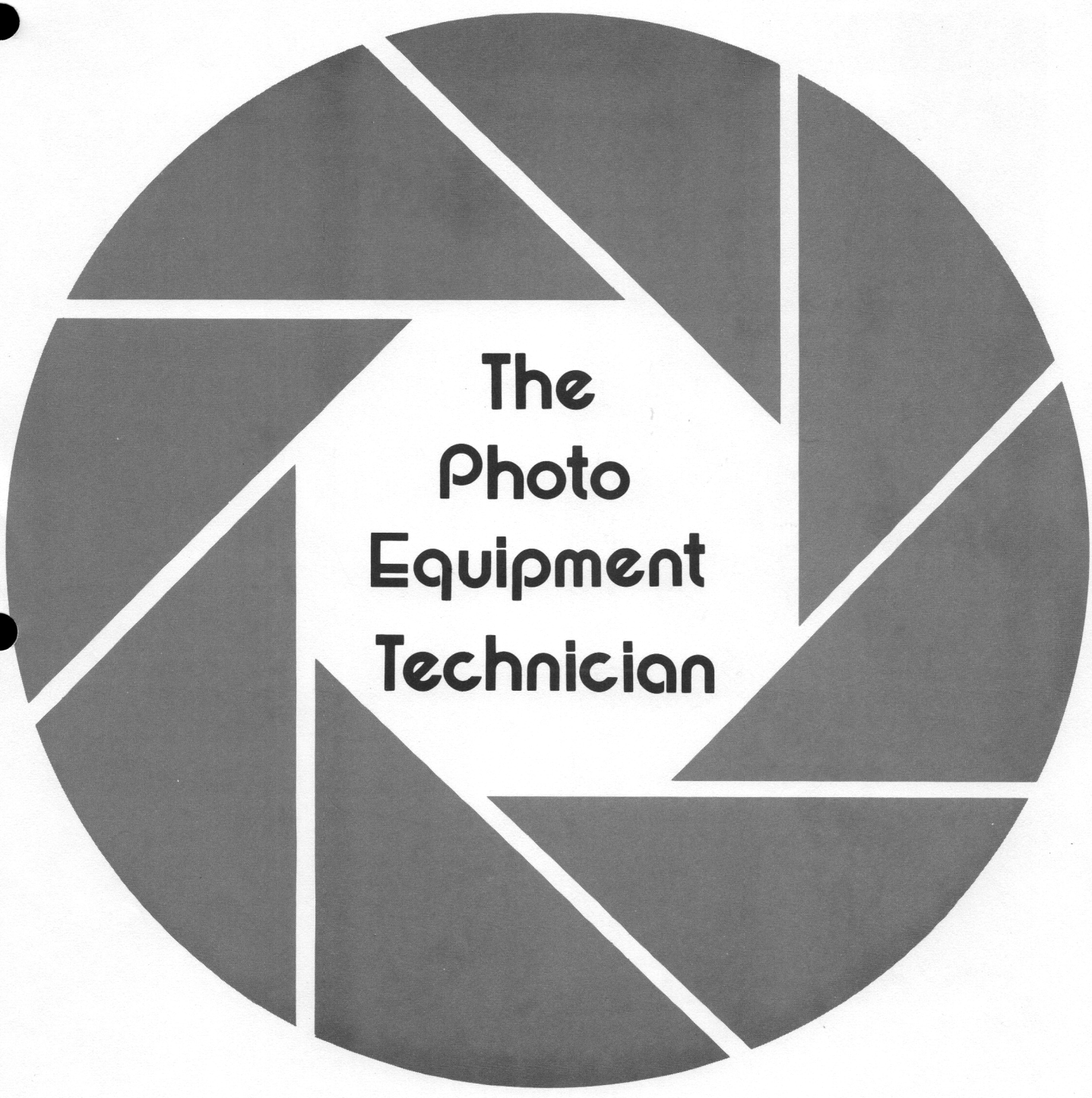
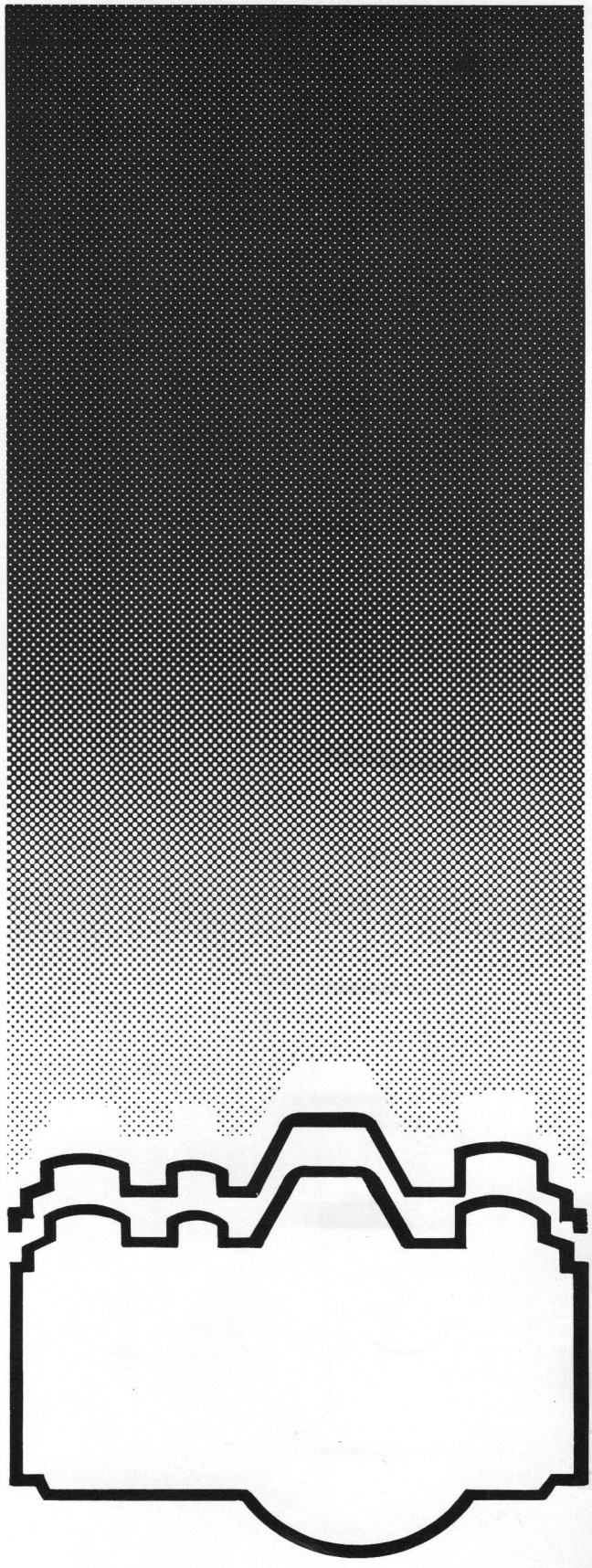
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Author
E.C. Fowler

Design
Ivan Bardon

Advisory Committee
Jim Amos
Metro Camera Service

Doug Donaldson
Western Camera

Bill Glennon
Lindahl Camera

Mike Lowe
Rocky Mountain Camera Repair

The Photo Equipment Technician

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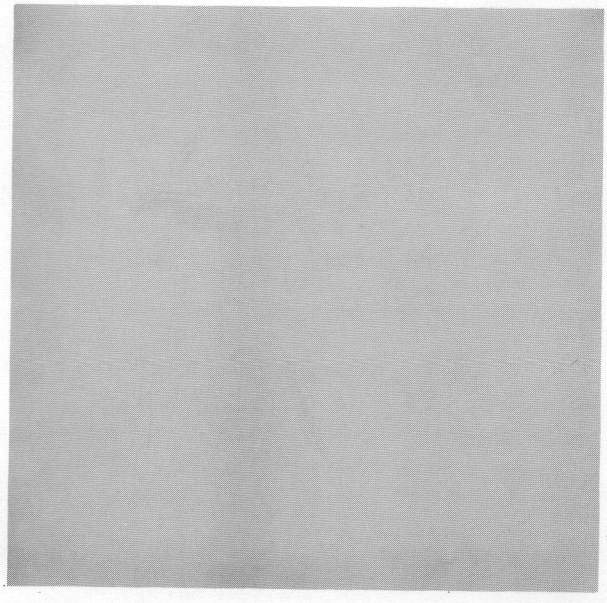
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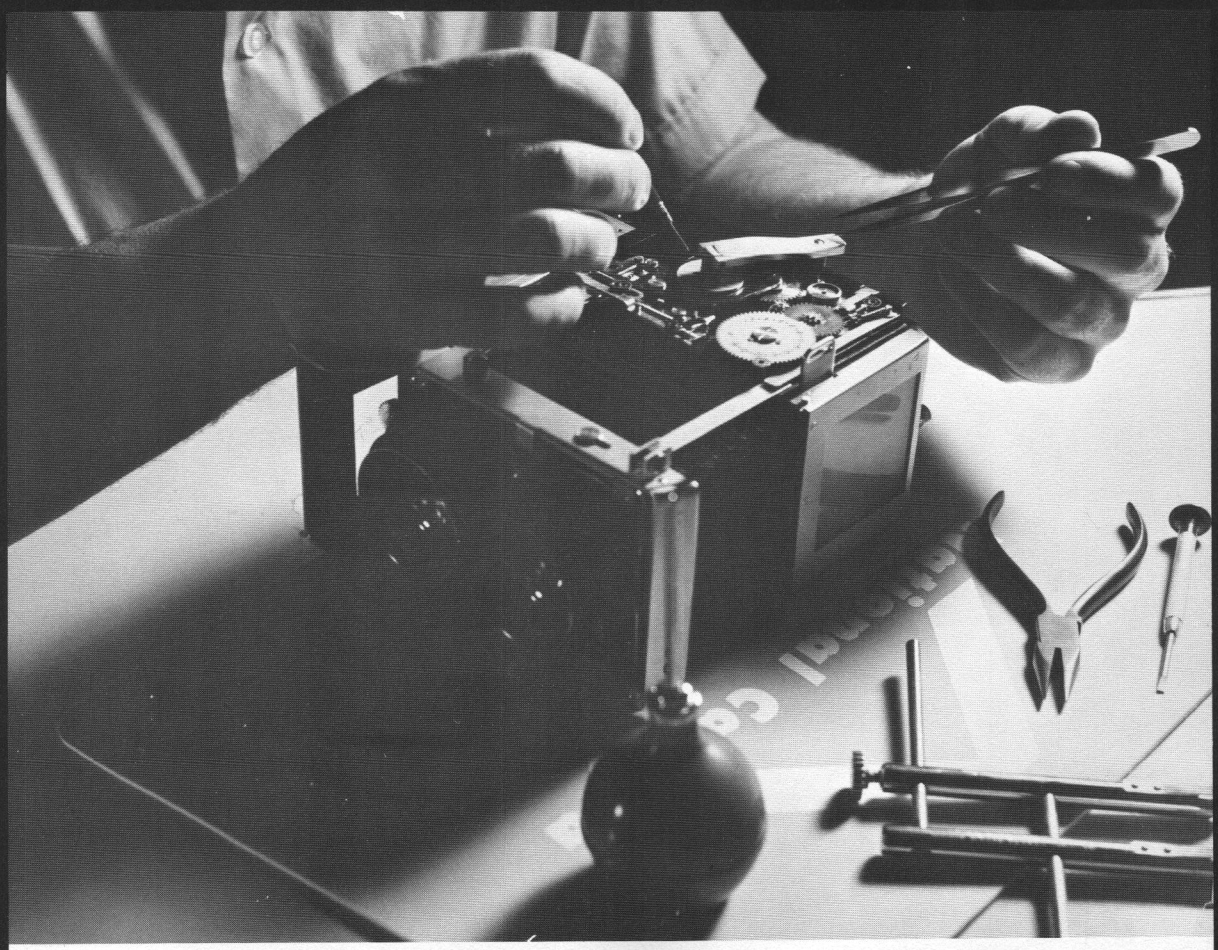
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National Camera, Inc.
Technical Training Division



A WORD OF WELCOME

This is the first assignment of your technical training course. With it, you are starting on the road to a bright future as a photographic equipment technician.

Many of the concepts you will use throughout your training program are described here. Many school procedures and study helps are specified in this text, and you will want to refer to it frequently. In any well-planned instruction program, each step is designed to help you progress toward the final goal; each makes the next a little easier to take. Remember what you learn in this first important step - it will give you a firm footing and direct you on a true course toward your destination.

BEFORE YOU BEGIN...

This, like all future assignments, includes a Procedure Sheet. Your first step in any assignment will be to read the Procedure Sheet. It will tell you the exact steps to take in the study of each assignment.

Read the Procedure Sheet accompanying this text now, before you go any further.

AND...

You're on your way!

YOUR FIELD - NEW AND CHALLENGING

The study and practice of photography is widespread; indeed, it is the most popular hobby in the United States and one of the fastest growing businesses in the world economic community.

Yet the skilled camera and photo equipment technician is an individual rarely encountered and constantly sought. Why?

Training opportunities, in the past, have been severely restricted - usually limited to those few craftsmen able to learn through apprenticeship in an established shop. Supplementing this method were a few scattered, very specialized factory training programs. To such inadequate beginnings was added a rapid increase in quantity and complexity of photo equipment reaching the market, far exceeding the pace of training-program development. So the technician gap, instead of closing, widened by leaps and bounds. This is the basic cause of the problem you will help to solve, and of the great opportunity for personal reward which lies ahead.

SOME WAYS AND MEANS

Camera service can be handled in several ways:

1. The camera manufacturer may be contacted and the camera mailed to his factory for the needed work. But many cameras are manufactured outside the United States. This procedure usually is painfully slow, frequently strangled in red tape and occasionally completely impossible. Communications between an individual customer and a giant manufacturing plant are awkward and frequently unsatisfactory.

2. The owner of the camera may attempt to make repairs himself. Such desperate measures are likely to result in what camera craftsmen lament as their greatest problem: the second-hand repair job. What was originally a simple adjustment turns up in the workshop as a box of several hundred miscellaneous parts which were once assembled into a camera.

3. The camera may be given to a competent, efficient, trained photo equipment technician. This is by far the best system from every viewpoint. The service man is available locally; he can talk directly with his customer about individual problems; delays and risks associated with long-distance communication and shipping delicate equipment are eliminated.

4. The photo dealer may well be used as an intermediary. Dealers with a well-organized and staffed service department are rare, but worth seeking out. The dealer who does not have his own service center must still choose between methods one and three

Because of the difficulty in finding a good service technician, the customer all too often is forced into a fifth solution: he lets his camera gather dust in a drawer.

Service systems have not kept pace with industry needs. The answer? More technicians in the field, continuing professional development of service personnel.



MULTIPLE SKILLS AND VERSATILE ROLES FOR THE MASTER PHOTO EQUIPMENT TECHNICIAN

The photo technologist has been described as a fine instrument mechanic. His knowledge and skill are comparable to those of the gunsmith. His attention to detail and fine workmanship is equal to the watchmaker's. But essentially the photo-technologist's field, like these others, is unique. It demands specialized knowledge, special techniques, special development of your individual talent.

You will learn through your National Camera training many facts and techniques related to watchmaking. Many shutters, for example, employ an "escapement" mechanism -the same basic timing device found in most watches. The handling of parts and certain techniques of cleaning and lubrication are much the same as in watchmaking. The principal difference is that camera parts are generally more rugged, and are subject to more **power** and less **wear** than watch and clock parts.

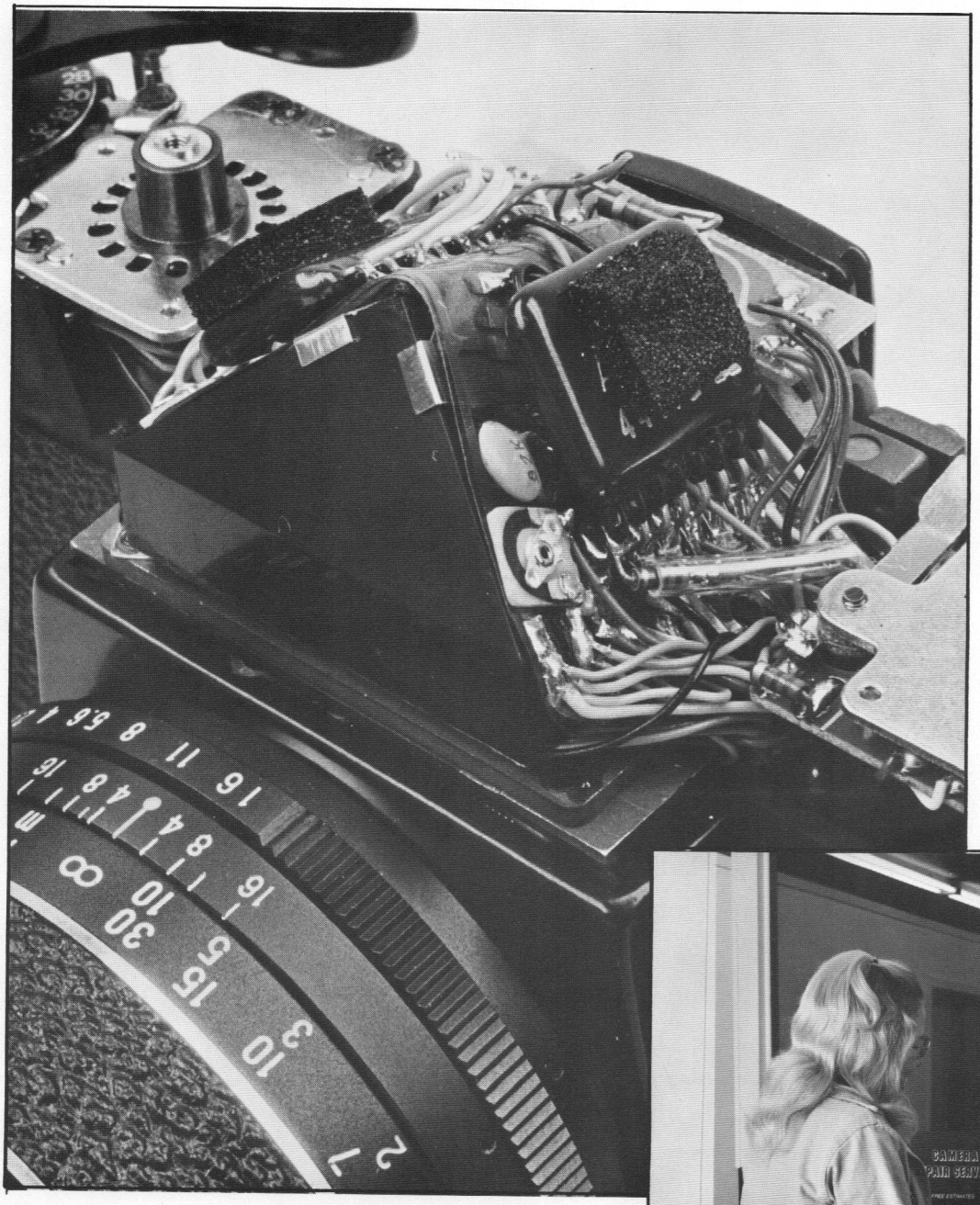
The mechanical intricacies of photographic equipment are a vital part of your training. You may choose to have all your machine work done by someone else. Or, as time passes, you may add to your shop equipment until it includes all the machine tools useful for complete service. Your training will help you to develop your shop with a minimum of difficulty, and in a way that is economically practical.

Electricity and electronics are also important. The problems involved in repairing and adjusting meter movements and in the tracing of faulty electrical circuits will be yours to solve. Modern photo equipment includes more and more electronic subassemblies, both in timing and exposure computing. You will soon see the relationship between the camera technician and the maintenance of commercial television equipment -and your local TV station will discover that you are a valuable consultant. You will learn to use to advantage some sophisticated electronic testing equipment.

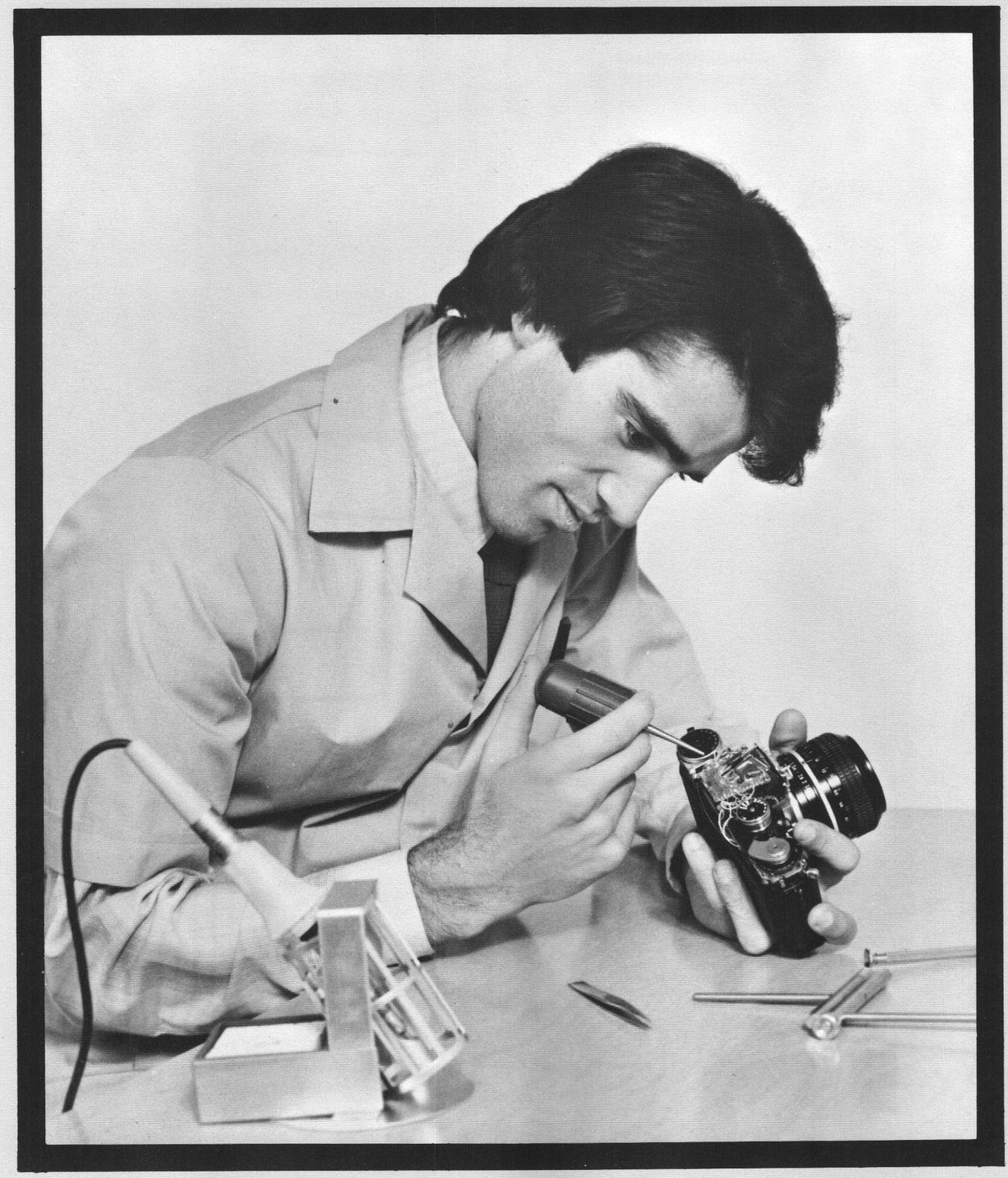
The equipment specialist is familiar with the science of optics. He is constantly sought out for his opinions and recommendations when a new lens is purchased. In the same way, the technician is an indispensable consultant when a substantial investment in any piece of photographic equipment is to be made. He has that specialized knowledge of equipment function, quality, applications, adaptability, efficiency, component parts and accessories for which the prospective buyer is searching. He has an enthusiastic interest in these details which makes him the confidant of all photography-minded people.

The technician's field is highly specialized. Yet it touches many related areas and requires basic understanding of the

uses of tools and machines, electricity, optics, photographic processes and customer needs. A comprehensive grasp of all phases of his business is the hallmark of the professional service technician—the key to his value in the photographic industry.





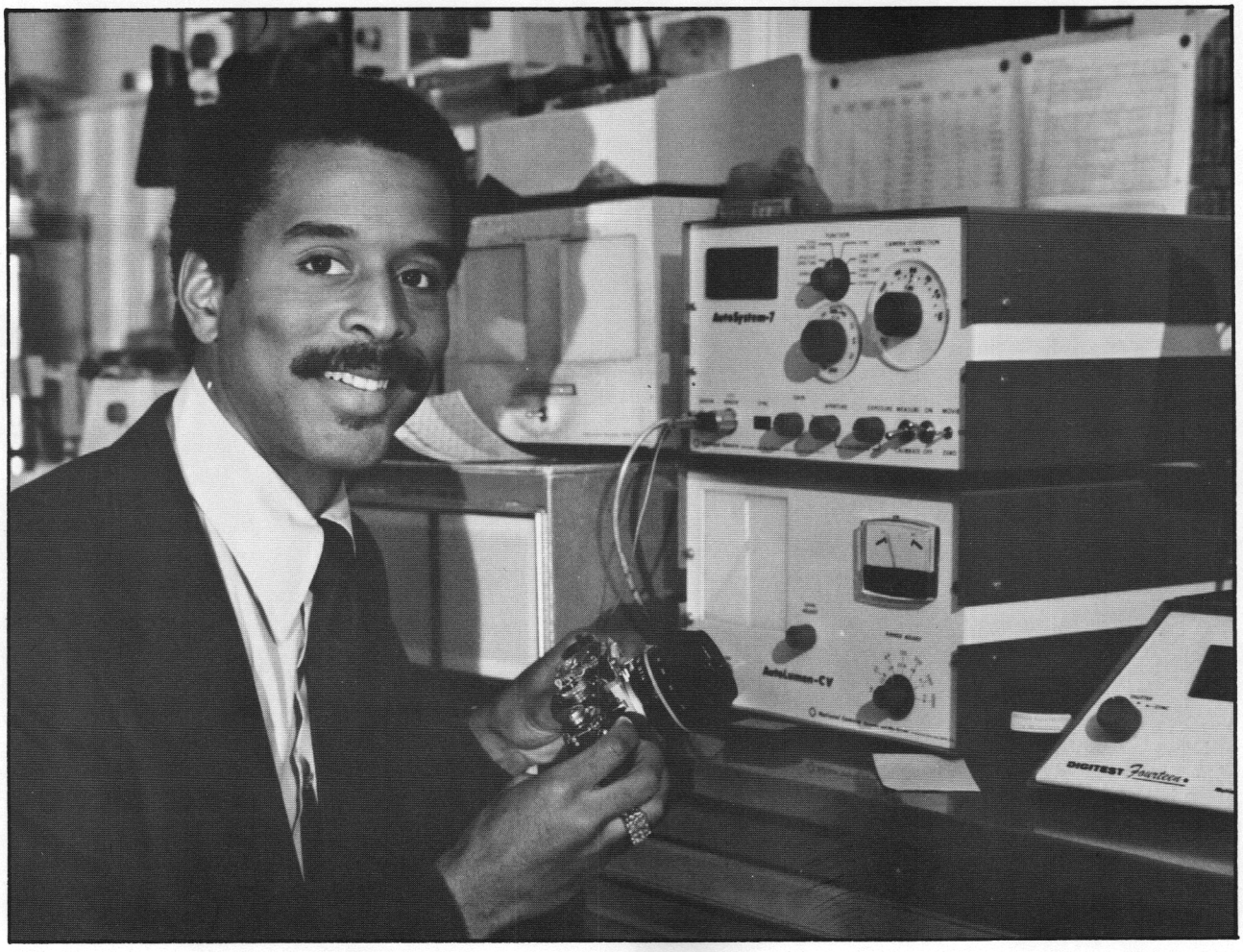


THE ROLE OF THE TECHNICIAN

The camera technician is a man who is needed in every community. There are industrial and commercial photo installations in need of professional maintenance and service experts. There are educational and governmental facilities relying heavily on the photographic sciences for research and continuing progress. There is the average American family, which owns more than one camera. And about half of all these cameras, according to one estimate, are out of operation at any given time.

Many problems can "develop" in making good photographs. The knowledgeable technician can explain the reason for many of the photographer's failures. He knows that the basic machine which produces those pictures is, after all, a technical device; and such devices can fail. He understands photographic problems because he has a knowledge of many different types of cameras. Even when he deals with unfamiliar cameras, chances are that such equipment will be a combination of mechanisms based on the principles with which he is thoroughly acquainted.





YOUR PERSONAL OBJECTIVES

As a camera technician, you may operate your own shop for the maintenance and repair of cameras, projectors, exposure meters, darkroom equipment and other photographic apparatus. You may have a successful service shop as either a full- or part-time business.

You may operate a shop in conjunction with your own or another photo supply store.

You may work in the service department of a manufacturer, or as installation engineer, service manager, quality control consultant - or a combination of these.

You may work with scientists, publishers, educators - in any of hundreds of industries which rely on photography as part of their day-to-day operation.

In order to prepare you to meet these challenges and expanding opportunities, your National Camera course will teach you a great variety of subjects:

First, to understand and repair various types of photographic equipment. This will include:

- shutters, from the simplest box camera to the complex, electronically programmed types used in cameras today.
- cameras and their components: film transports systems (manual & automatic)
  viewfinding systems
  focusing systems
- rangefinders and other aids in focusing

In addition, you will learn to test the equipment which you service and make fine adjustments accurately.

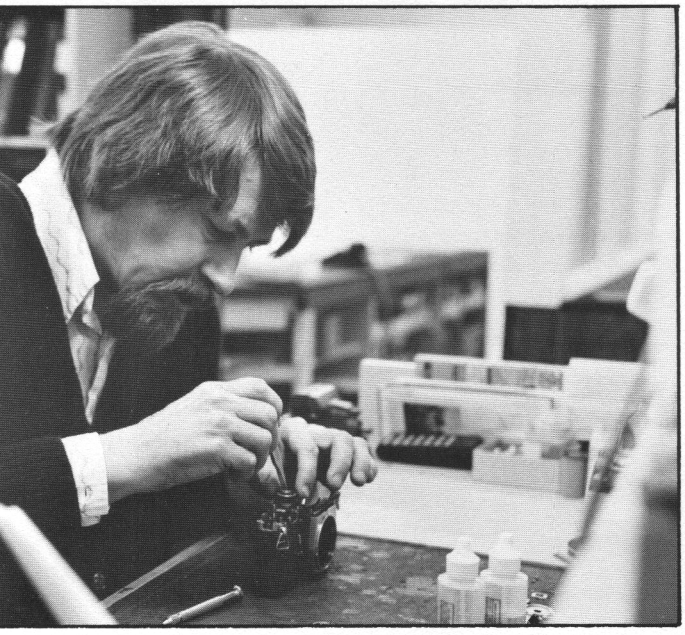
You will learn to diagnose the problems encountered in photographic equipment - how to determine whether repairs are needed and what this means to you and your customers in terms of time and expense (an essential ability in successful service work).

If you are not already familiar with photography, you will learn the basic principles and obtain practice in photographic work which will help you judge the work of others and distinguish between **camera** and **cameraman** failure.

Of great importance is that portion of your course which will teach you how to make your service shop or department earn greater profits. You will learn to avoid the pitfalls of bad estimating ... where and how to find customers ... facts on equipment investment ... parts inventory ... business procedures.

The photo equipment technician has a wide range of choices for his individual career. These opportunities have greatly increased in recent years and continue to expand. Your course is designed with **all** these possible goals in mind. You may choose to specialize in one or another aspect of photo-technology ... you will acquire a solid background in all the essentials in order to enable you to develop your abilities fully. These include not only the technical work on the equipment itself, but the theoretical background and scientific principles which will give you true understanding of your work. They also include orientation in business practices and management as related to a service facility. Your course gives you the complete grounding you need to enjoy a successful, secure career.

WHAT'S AHEAD? A COURSE PREVIEW



With these objectives in mind, National Camera Technical Training Division has planned a concise, progressive and easy-to-understand course of instruction. Each assignment will include both theory and practice. Subject areas have been worked out so that each subject you study will be of greatest value in working with a wide range of equipment.

Your course begins with fundamental studies in certain arts, sciences and skills which are the original elements of the photo technology field. The basic camera mechanism, photography and photographic processes, an orientation in optics - the fascinating behavior of light - and the understanding and use of the craftsman's tools.

If you think of these as the raw materials you will use in creating your finished product - in which the quality of the raw materials always shows - you can better understand their importance. Perhaps previous experience has already given you a good background in one or more of these areas. So much the better - you may accelerate your study rate at those points if you wish. But where you find yourself approaching new ground, feel your way with care and work until you are confident of your understanding and ability in each successive step.

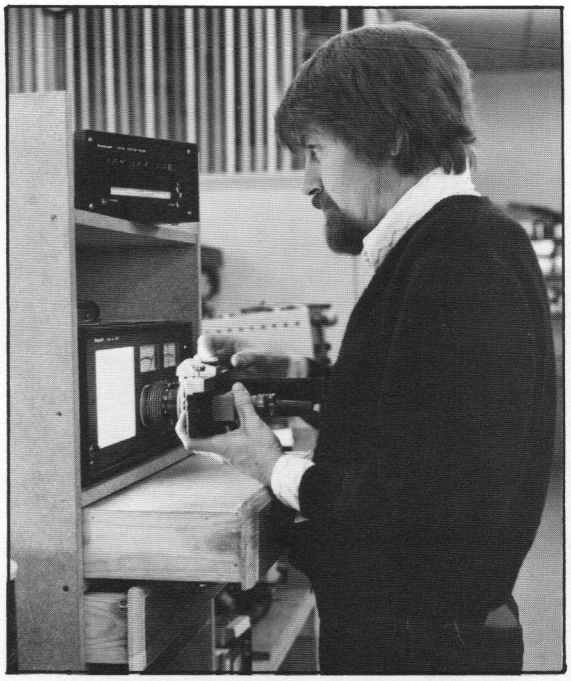
Soon you will be ready for more intensive work in photo technology. You will receive practice equipment for your workshop assignments, and you will find these more and more exacting. Your skills are developed to the point of concentrating on certain kinds of photographic equipment. Here you may find a clue to interests and talents for later specialization.

Finally, you will receive instruction in workshop operation, organization and pricing. There are many good reasons for scheduling these at the end of your training program. After all, it is at the end, not the middle or beginning, when you are ready to turn preparation into practice. Just as important is the necessity of your being thoroughly prepared before you offer your new knowledge and skill to the demands of any employer or the public.

After graduation, you may wish to take advantage of the two week Technical Training Seminars at National Camera headquarters in Colorado. Available at a nominal fee, these seminar sessions are not a prerequisite to graduation. However, if you feel the need to take an additional step in upgrading your knowledge and skills, the experience can be quite rewarding.

19.
1ST PART

Your National Camera training leads you from fundamentals to the sophisticated and specialized experience you need, in a logical and practical sequence. It includes both theory and practice, both technical and business training.



UNDERSTANDING AND DOING

It would be impossible to compile, and constantly update, complete step-by-step instructions in the disassembly, reassembly, repair and fine adjustments of all the cameras in existence today. However, experience has shown that with careful study of typical shutters, rangefinders, cameras and subassemblies, you will be able to understand even a piece of equipment which you have never seen before. Every unit, old or new, presented to you for analysis or practice has been selected carefully for its overall value in your total learning program.

Formerly it was popular in some fields to suggest that there is no need to study what was called "dull theories." Some people felt that they could learn the money-making aspects of a service field without learning anything but which screws to remove and replace. Such people were not good service technicians and soon found themselves out-stripped by advancing technology and out of business. Without theory you might acquire reams of procedures but you would still be stumped when you ran into a new problem or some piece of equipment for which you had not received specific instructions.

Learning the unique skills of camera technology will bring you many enjoyable as well as profitable hours of study. You will learn not only how to repair, adjust and test a piece of equipment but the **why** of its need for repairs and the **how** of its response to test operations. Then you can apply this "dull theory" to other situations. Your customer will respect the knowlege and skill with which you are able to analyze and correct his individual problems.

Old ways of learning are inadequate in demanding fast-changing technical fields. Learning "by rote" isn't good enough - you must learn to understand what you are doing as well as to do it. This enables you to grasp new developments and trends when they come - and they come constantly.

6. ANALYSIS

SOLVING YOUR STUDY PROBLEMS

Learning any strange or new subject is difficult.

You will receive "NEED HELP" sheets so that you may conveniently ask questions of your instructors. Personal attention to your problems is one of the keynotes of National Camera training. Every individual is different. You may need special guidance at different points in your studies. Your instructors are as close as your nearest mailbox and their personal discussions with you will be as frequent and detailed as you want them to be.

Use the "NEED HELP" sheets to ask questions.

- about the assignments and texts on which you **are working** or on **previously completed** work (do not anticipate some portion of the course not yet reached - many questions will be answered as you progress and advanced questions are an unfair drain on your instructor's time).
- about a **specific** camera of a general type already covered, if you have a particular workshop problem - in this way special guidance is available on points not specifically covered in your training.
- specific facts you need to know: don't just request "more information" but state exactly what information you want or what problem you have encountered.

Some "NEED HELP" forms are included with your first shipment. When you send a "NEED HELP," answers are typed directly on the form to be returned to you. **No copy is kept here.** Be sure to return the form if you need further help or want to ask an additional question on the same subject. If necessary use a second "NEED HELP" form and return both.

Remember that even your instructors cannot be expected to know all - if they do not have the specific information you need they will try to get it for you. In rare instances, they may be forced to tell you that such data just isn't available.

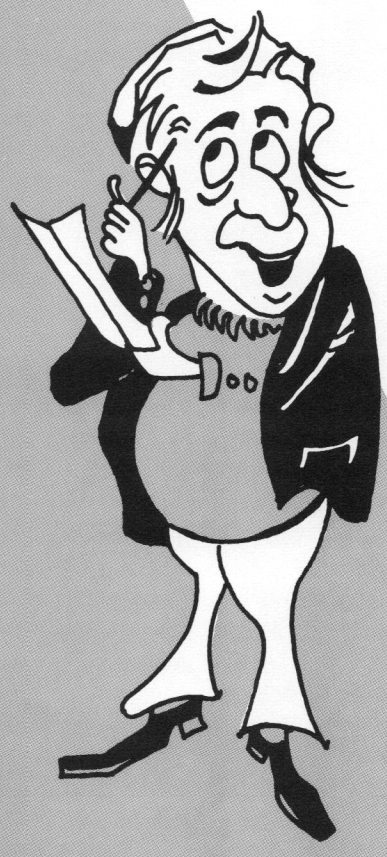
Your instructor's job is to teach you - not merely to give you answers. He will help you learn how a question can be solved rather than solving it for you. By following this principle National Camera has evolved a dynamic method of study: a problem-solving method of doing your home practice work and a comprehensive system of examinations and grading to help you get the most out of every minute spent on your course.

CONSOLIDATING YOUR NEW KNOWLEDGE

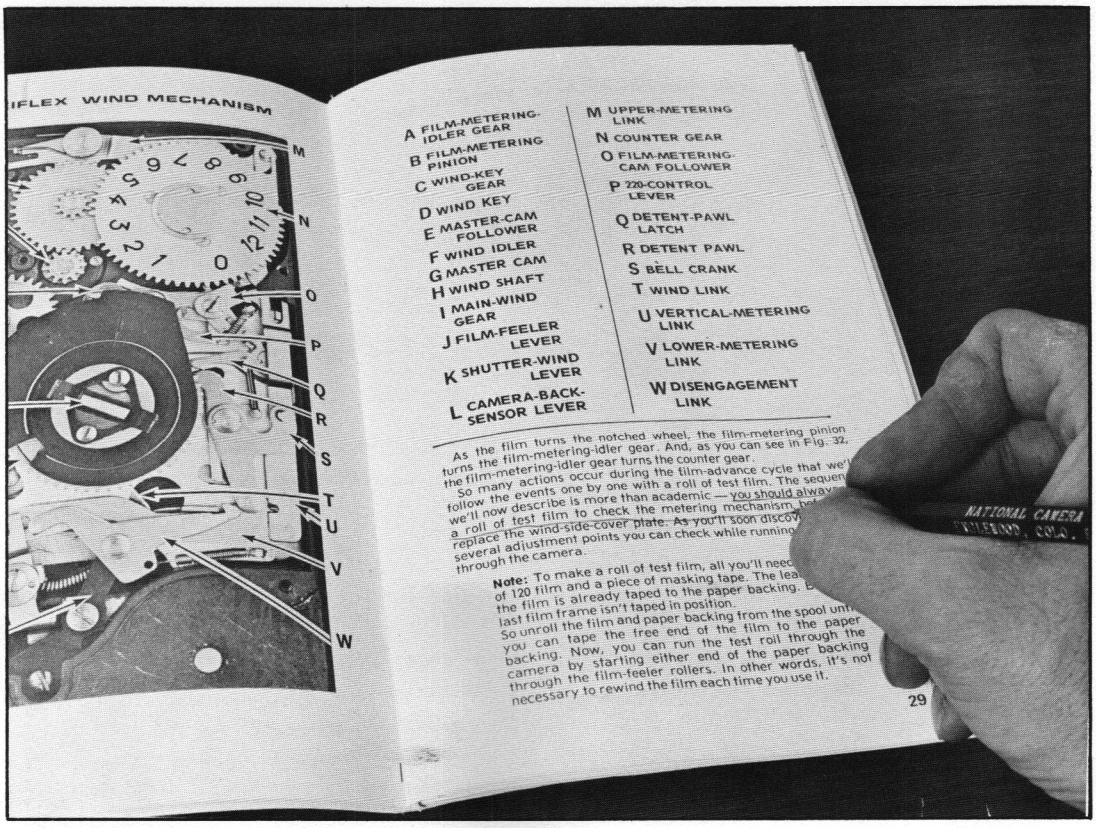
Some assignments in your National Camera course include a written examination. These may be essay-type, multiple-choice, or a combination of various types of questions. Naturally, you have the textbook and you may look up the answers to any written quiz questions. **Whenever it becomes necessary for you to do so, let this be a signal to you that that phase of your work needs extra concentration.** Some questions require that you work out an answer **not** directly quotable from your text. This technique provides a valuable exercise in analysis for you - much as you will be called upon to do in day-to-day photo equipment servicing.

At a point about one-third of the way through your course, you will be able to begin earning money with camera service work if you wish. Obtaining cameras to repair will not only help you to study on a pay-as-you-learn basis, but will give you valuable practice in applying the knowledge you are gaining.

Certain techniques help you remember and use what you have learned to the best advantage. Briefly, they are:



- written examinations to emphasize and clarify what you have learned;
- additional reading and research where this is recommended for deeper understanding and knowledge;
- practical work to apply the principles to on-the-job situations;



STUDY AND WORKSHOP TECHNIQUES

Your most important study aid is the **study habit.** If you have recently been in school or taken another home study course, you have not lost the study habit. If you have had no formal schooling for a number of years you may find it necessary to renew the practices of systematic study. From school days you can remember the practice of "cramming." This forced and concentrated study was designed to help you remember something from one day to the next. When you want to remember something permanently, there is a better and easier way.

The following pages describe the National Camera system for effective learning - a proven method, carefully planned yet simple. It will help you absorb the material in the minimum time and with the greatest possibility of remembering what you have studied.

About time and place.

Your future career deserves your undivided attention. The way in which you plan your study hours is important. Scheduling study time is a matter depending on individual circumstances. The important thing is to set aside a regular time

each day or several times a week to do your studying. Try to choose a time when you can normally study without fatigue. Short sessions every day are better than long, tiring study hours scheduled only once a week. As you regulate your study hours, you will probably find that you can study longer periods without fatigue. If your schedule requires longer study periods, take a few minutes' break in mid-session.

A suitable location is also important to your study habits. Try to arrange for a small study area where you can concentrate on your work and keep your materials organized. In an early text you will receive instructions on how to build or improvise a good workbench. This should be located in an out-of-the-way spot where distractions are at a minimum. It may not be possible to isolate yourself or have ideal study conditions all the time but you should try to follow these suggestions as closely as possible.

Written assignments: studying your texts.

When you first begin studying a new subject (after checking the procedure sheet), read the text through quickly. This rapid reading will give you a good idea of what the text is about and what you may expect to encounter. Don't stop at any particular point, even though the meaning is not completely clear.



A second reading should follow as soon as possible - certainly within 48 hours. This time the parts not fully clear to you will stand out - impress themselves on your attention for further study. You may want to pencil mark these areas as a guide to your next reading. Although some students hesitate to write in a book, your personal notations may make **your** texts even more valuable.

Next, go over the text again, reading only the sections not clear to you. Re-read each of those parts until their relationship to the remainder of the assignment becomes more evident.

Now read the text for a fourth time. This reading should take the longest time because you should re-read each section until its principle points are firmly fixed in your mind.

If you follow this simple system, you will find that you can remember the material very clearly.

Practical work.

Your workshop, or practical, projects are the heart of your training program. These projects are preparations for the actual work you will be doing - the job assignments you will be entrusted with, and with which you will earn a good salary or make good profits in your shop. Make it a matter of principle and personal pride to do each one **as well as you can** - not just well enough to receive a passing grade. Each project outstandingly completed is an investment you are making in your future. When you are depending on your understanding and skill in photo equipment service, this kind of investment - your personal commitment to do your best work every time - will pay dividends in better job opportunities and higher profits.

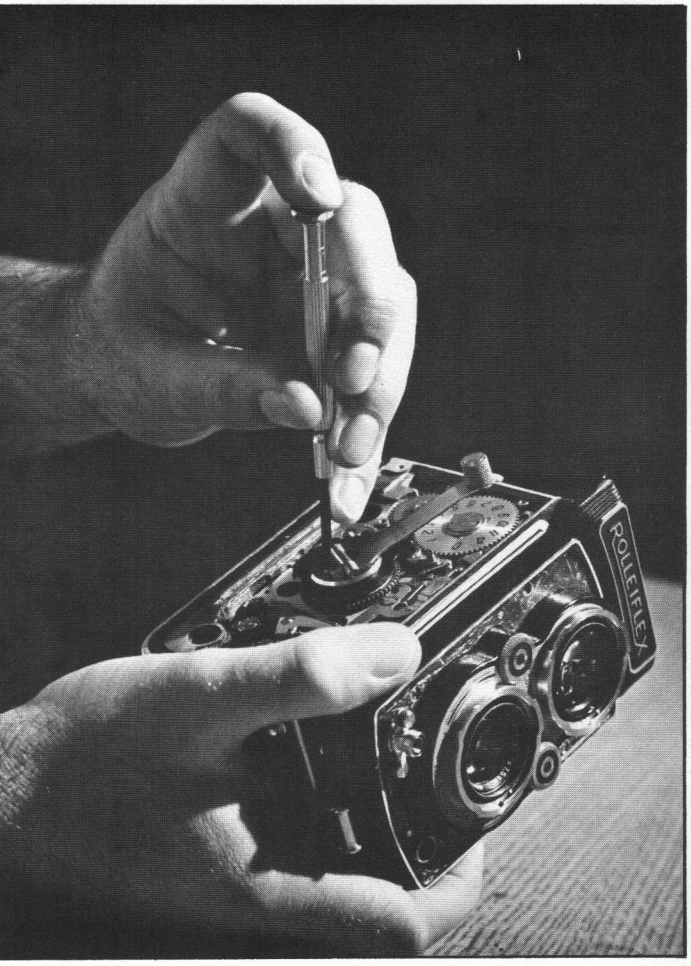
Read and re-read your text before you start work, so that

you will be familiar with the general nature of your assignment. Have your workbench arranged in an orderly fashion, your tools and materials within convenient reach.

Here are some points to remember in adopting a systematic and successful approach to your practical work.

Preparation.

Before you begin, re-read the portion of the text describing what you are about to do. Study illustrations carefully. Keep your text open on your bench. Follow each step accurately and be prepared for what is to come.



Practice.

If you fumble and your fingers seem clumsy, retrace your steps and repeat what you have done. Disassemble and reassemble one piece many times, if necessary, until you feel sure of what you are doing.

Persistence.

As disassembly proceeds, you will be instructed on the operation of various parts of the mechanism, to understand them better. As parts are removed, you will understand more and more of the intricacies of the mechanism you are studying and the relationship of the parts to each other. Don't be discouraged if this operation seems difficult and tedious at first and your fingers all seem to be thumbs. Practice and experience will give you the dexterity and speed of a professional craftsman. As your skill increases, so will your interest in and appreciation of the fine equipment on which you are working.

Problem Solving.

As you proceed through your National Camera course, at some point you will probably experience difficulty during a disassembly operation. When you do: STOP. Replace what you have removed and remove it again. Do this until you are sure of the procedure. In this way, reassembly will not be a problem. As you disassemble each piece, you are also seeing how it reassembles, and later reassembly of successive parts will take on a logical order. Following this practice diligently will be valuable while you are learning. Later, when you are working on equipment which may be unfamiliar to you, it will be an indispensable aid in your shop technique.

Variations.

Variations in equipment can be disturbing to a camera technician, especially to a novice. It is surprising how many variations of a particular piece of equipment actually reach the market. For this reason, even a unit of practice equipment which you receive with a course shipment may have some variations from the version described in your text. It is extremely important that you recognize how minor these variations are. In most cases you can apply or adapt the same principle or technique described in the text. In cases where a significant number of other students have experienced difficulty, you will receive special instructions pointing out differences. But many times you will discover slight variations on your own. Learning to take them in stride is an important part of your training. Later you will know how to handle a piece of equipment which does not exactly duplicate any similar unit you may have seen.

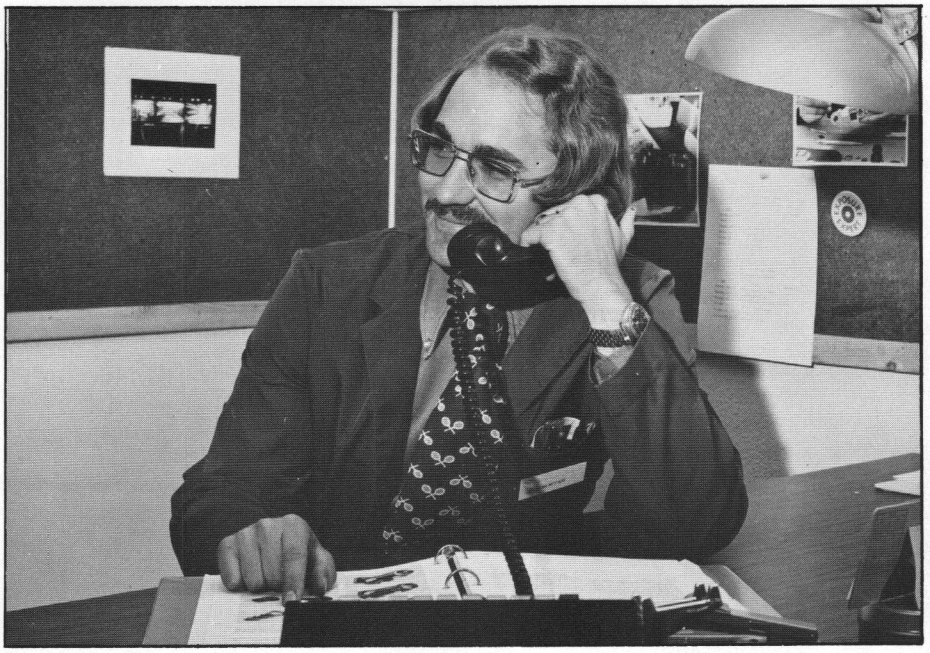
The key to disassembly, and a rule you must memorize: always understand a part's function before you remove it.

Completion and follow through.

Reassembly is basically the opposite of disassembly with one important exception. During the reassembly stage you discover bad, worn or damaged parts. Each part, as it is assembled, should be examined carefully, and tested after placement in its proper position for its function with previously mounted parts. **Always test the unit after the addition of each part.** This rule cannot be stressed too strongly. If you follow it, your completed assembly will invariably work perfectly. If you do not follow it, you will inevitably soon find yourself in the position of having to repeat an entire disassembly because you failed to test the first part reassembled. Remember this rule as the first law of camera equipment technology.

That's the key to assembly - also worth memorizing: always check the function of a part, as you install it, with all previously assembled parts.





Need Help?

If you encounter serious trouble in either understanding the text or completing the practical work, send a "NEED HELP" form to your instructors. Before you do this, **make sure you have done all you can to solve the problem yourself.**

> **Have you gone over all the instructions and aids sent with that particular assignment?**
> **Have you referred back to previous assignments dealing with related subjects?**
> **Have you repeated each step in the disassembly or reassembly as it is described, observing and testing at every stage?**

If all your answers are "yes" and you are still faced with a major problem, then you should contact your instructor. Don't send in a written quiz or practical project which you yourself feel does not deserve a passing grade.

In completing the written quiz, refer to your text whenever you find it necessary. If you have read the text as suggested you should not have to do this often. When you do, it is a signal that you have not yet thoroughly absorbed the point in question. Re-study the portion until you are confident of retaining it clearly in your memory.

Returning assignments.

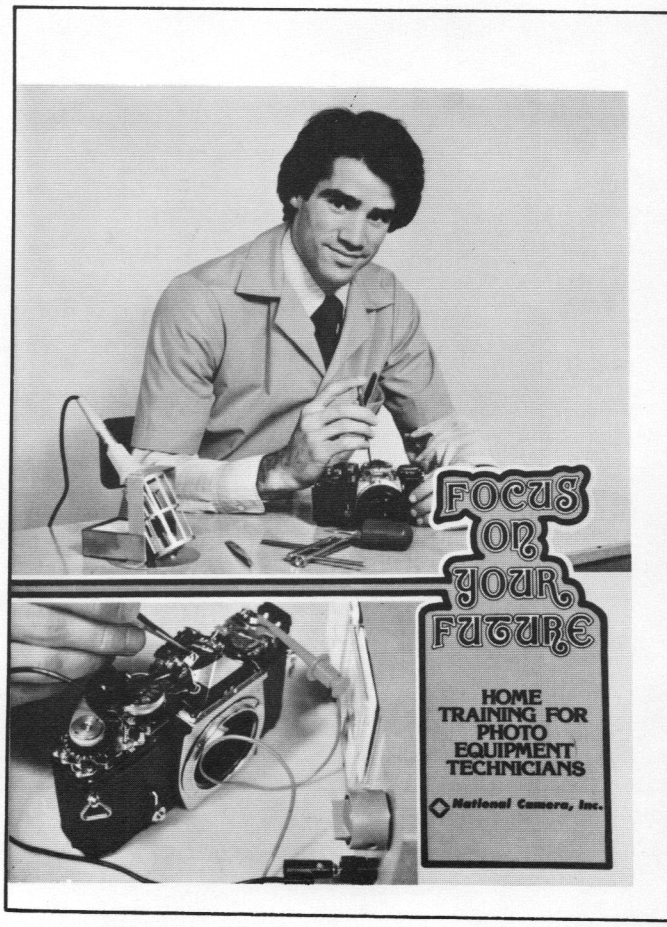
Return your completed assignments as instructed - both written and practical. For prompt service, address everything properly, to the attention of the **Instruction Department.** (You are provided with reply envelopes for written work.) Remember that miscellaneous correspondence included with your assignments causes delay in processing both. Send other communications to the school separately. Do not return partially completed work.

When returning practice equipment, pack carefully. You are responsible for getting these items back in good condition, just as their safe shipment to you is guaranteed by the school.

He who hesitates...

If not actually lost, he who hesitates is at least off course and in danger of losing his way.

Your overall training program provides for an average of three completed assignments per month. Unless otherwise arranged, you're allowed up to one month to return an assignment before you are notified that you're officially "late" with your lessons. When you are working in the field, you will be faced with the requirement to complete jobs on a schedule as "promised" to your customer. Therefore, during training it's important to adhere to the schedule as "promised" on your enrollment form. If you feel that other commitments will prevent you from spending the necessary hours per week normally required to maintain the standard assignment schedule, it's essential that you communicate with the school so that special arrangements can be made for you. You'll be given an opportunity to do so early in the course, so consider now what constitutes a realistic study schedule for you.



INSTRUCTION METHODS AND SCHOOL PROCEDURES

NOTE: You should have received a copy of Technical Training Division's catalog, FOCUS ON YOUR FUTURE. Keep your copy for reference as it contains the answers to many of your questions. If you do not have a copy, request one from the Information Services Department.

Definitions of terms are provided later in this text.

SUBJECT AREAS

Each subject area in your National Camera course consists of both study and practical work projects. You will receive at least one textbook (yours to keep), procedure sheet and quiz for each subject area covered. With many course shipments you will receive tools, materials and/or practice equipment to be used for the completion of one or more practical projects. You will also receive supplemental study materials such as Nat Cam Manuals, Servisheets and other special aids with certain subject areas.

Following the procedure outlined for you on the procedure sheet accompanying each text, you will complete the quiz and practical work and return both to your Instruction Department for grading.

GRADING

You are graded on each part — the quiz and the practical work. Your grade for the subject area is a combination of the two. The formula for combining the quiz and practical grades places twice as much emphasis on the practical work. We describe the subject area grade as a weighted average for the two. For instance, if your grades for a certain subject are 90 for the quiz and 80 for the practical, the weighted average is computed like this:

90	Quiz Grade
80}	Practical project counted twice
80}	

250 ÷ 3 = 83.3 (your grade for the subject area is 83)

If the weighted average had been between 83.5 and 84, the grade would be recorded as 84.

Your graded quiz is returned to you with appropriate comments. Your grade for the practical work and final grade for the subject area is noted on the quiz sheet for your information.

You must complete each assignment satisfactorily in order to graduate. The following grading system is used.

100-95	Excellent
94-90	Very good
89-80	Good. A minimum of practice will yield satisfactory results.
79-70	Passing. Re-read and re-study portions of texts as noted.
69 or lower	Unsatisfactory. You must take, and pass, an alternate examination or repeat a practical examination before the next assignment may be undertaken.

Previous experience.

If you feel that you have had sufficient experience in a particular subject area, you may write to the Instruction Department and ask to be excused from the practical assignment. You should, of course, state what the past experience has consisted of when you write. If the request is approved, the instructor will send an excuse slip, which is to be included when the quiz is returned for grading.

Quizzes are not excused, as the school must have a grade for each subject. If the material is familiar, it should take a minimum amount of time to go over the text and complete the quiz.

Repeating assignments.

If you do not receive a passing grade on either the quiz or practical project, you will be notified. The specific problems or incorrect answers will be identified to help you. A second quiz or work project will be sent for you to complete and return. Your instruction staff will **continue to work with you** until you have mastered the requirements.

Because the course is progressively difficult, it's essential to understand all the material covered as you advance. Thorough groundwork enables you to go on to more complex problems with confidence. You will not be permitted to graduate until all course requirements have been met.

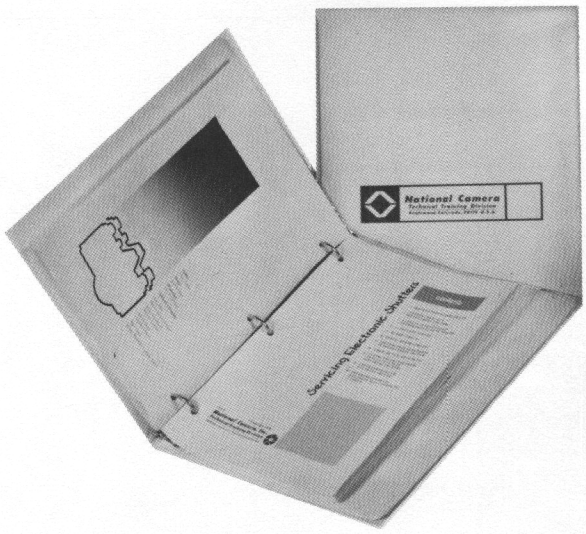
Graduation.



When you have satisfactorily completed all your assignments and your records are processed, you will receive official notice of your graduation from the school. Soon afterwards, your attractive Diploma will be in the mail. Your Diploma represents an achievement of which you will be proud and is worthy of prominent display in your office or workshop.

> If you complete all assignments with an average of 95 or better, your Diploma will read "... with highest honors."
> If you complete all assignments with an average of 90-94, your Diploma will read "... with honors."
> All other graduates will receive a Diploma which reads "... has completed the prescribed course in Photo Equipment Technology meeting all of the graduation requirements of National Camera."

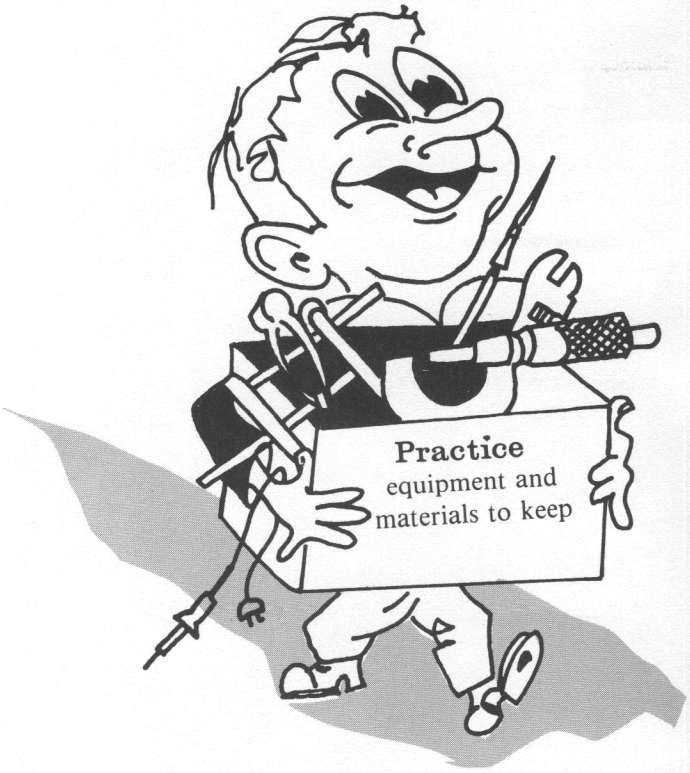
The Technical Training Division takes pride in its continuing service to and association with its graduates. You will be reminded of your special privileges as a National Camera graduate when you reach the end of your training program.



Shipments.

Materials are sent to you in groups - several assignments at one time. Practice equipment and materials to keep are sent with subjects which require their use. A packing slip is included with each shipment listing the contents.

You return assignments to the school **individually** as you complete each one. When you return certain units of a group (usually the next-to-last but varying with different shipments), a new group is sent so that you will receive it by the time you finish the work you have on hand. If, for any reason, your work schedule varies (vacation, moving, illness, etc.) you may want to have shipments held up or accelerated. Notify the Student Services Department in advance to make such special arrangements.



Deposits.

When an upcoming shipment requires a deposit for practice equipment you will receive advance notice of the amount required. Deposits are to cover the **value** of school property in your possession - they are not rental fees. No rental fees are charged on school property sent to you **unless the return of the equipment is overdue.** The normal maximum loan period for school property is two months, with special consideration given to students in overseas locations.

When school property is returned, any excess monies in your deposit account may be either left in that account for future deposits or, if you prefer, transferred to your tuition account as payments on your course. They will be left in your deposit account unless you request a transfer. No school property will be sent until a deposit covering its value is received.

IMPORTANT

You will be responsible for school property from the time you receive it until it is received back at the school. Insurance is optional but you should pack items carefully. The cost of restoring damaged equipment will be charged to your deposit account. The school guarantees safe delivery to you - you should check the packing list promptly. **YOU MUST REPORT** any damaged or missing items **IMMEDIATELY** to the carrier (Post Office or other) **AND** to National Camera.

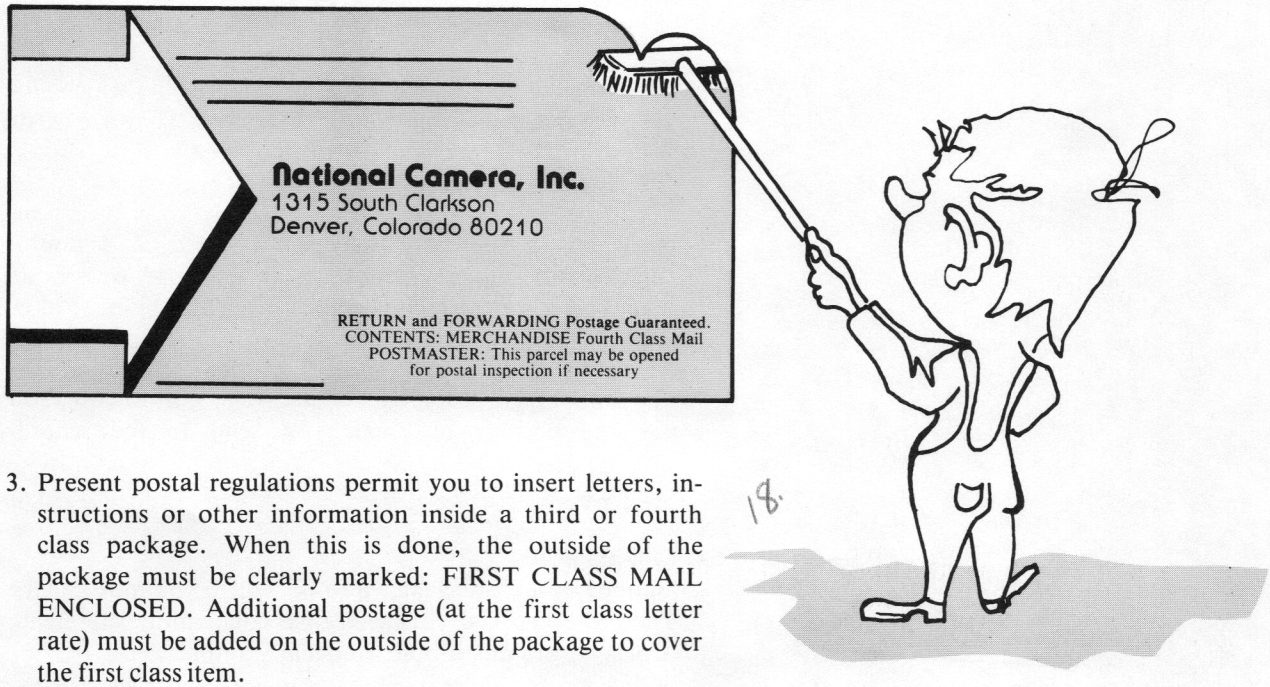
SHIPPING PHOTO EQUIPMENT AND MATERIALS

Packaging and Mailing Tips.

During your training program, you will receive and ship a number of packages - instruments, parts, shutters, accessories, tools. Listed here are some basic facts to remember.

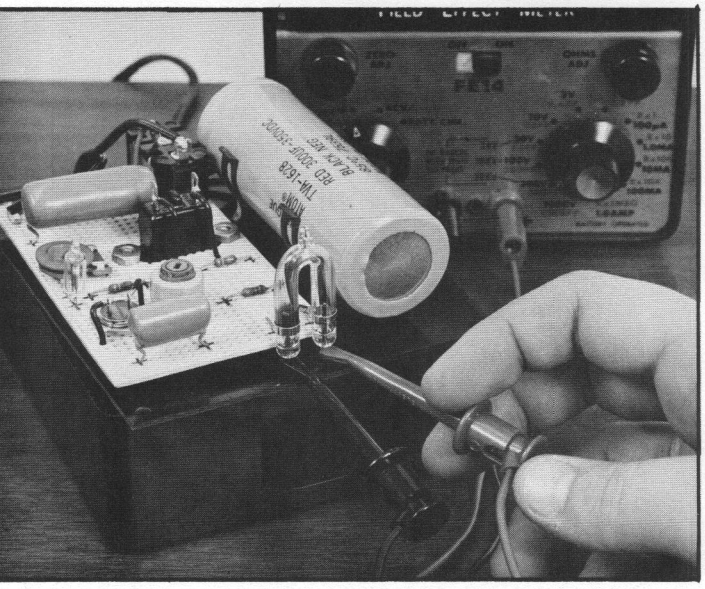
1. Most of the equipment is fragile and delicate and should be packaged with that thought in mind.

2. We recommend that each item be packed, with at least three inches of soft padding surrounding it, inside a strong corrugated cardboard carton. The padding may be shredded or crumpled paper, excelsior or other soft material. Some modern packing materials require less than three inches of padding, but the equivalent of such protection should be allowed. The package should be tied or sealed securely. Sealed fourth class packages should include statements contained on the label in the illustration below.



3. Present postal regulations permit you to insert letters, instructions or other information inside a third or fourth class package. When this is done, the outside of the package must be clearly marked: FIRST CLASS MAIL ENCLOSED. Additional postage (at the first class letter rate) must be added on the outside of the package to cover the first class item.

4. The outside label should have your return address as well as the destination. The school's name and address should be **clearly printed.** Mark packages to the attention of the proper person or department. Completed assignments are returned to the Instruction Department. Other school departments are listed later in this text with the specific correspondence which should be addressed to each. Keep this list handy for easy reference throughout your training course.



5. Place a "packing memo" inside the package. This is simply a slip of paper with your name and address and a list of the package contents. It not only serves for proper identification at the receiving point but protects you by identifying the package if the outside label becomes lost or mutilated.

6. All items are sent to you "safe delivery guaranteed." Despite the most careful packing, a package may suffer damage in shipment. If you receive a damaged package, notify the carrier at once: the post office, U.P.S. or other organization. Notify the school also. A duplicate shipment will be sent or the necessary steps taken to insure that there will be a minimum of delay in your study program.

7. Insurance on packages you ship to the school is optional. However, we recommend that you insure packages according to their estimated value, as rates are moderate for this precaution. You are responsible for return shipments until they are received by the school.

8. Save the container and packing material in which you received packages from National Camera. They are useful for packing and returning materials later.

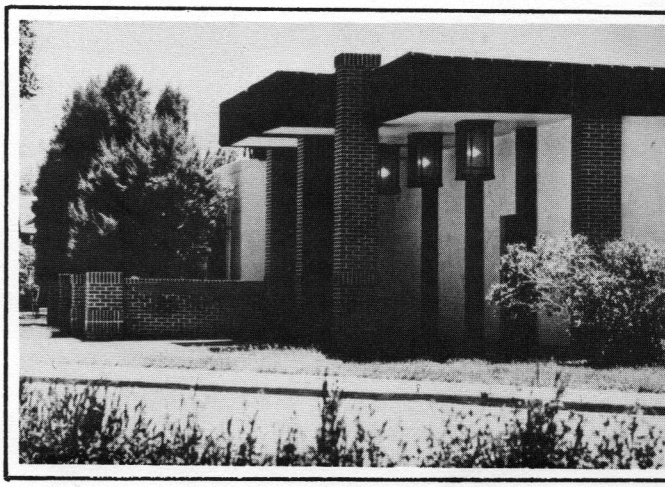
9. Some small, flat parts may be wrapped in a double thickness of paper, enclosed in an envelope with other items and sent by first class mail.

10. The school pays postage on course items sent to you. You pay the postage on items you send to the school.

Special Shipments.

Shipments are prepackaged to be sent to you most quickly. Therefore, special arrangements concerning shipments cause delays, are costly and frequently impractical.

Shipment **schedules** may be held up or accelerated to meet unforeseen circumstances.



YOUR MAP OF THE NATIONAL CAMERA "CAMPUS"

Refer to this section during your training for smooth, efficient communications with your school staff.

ADDRESS YOUR LETTERS TO THE RIGHT DEPARTMENT.

Send the items below, or questions and correspondence concerning them, to the department specified.

DATA PROCESSING DEPARTMENT	CHANGE OF ADDRESS NOTICES AND ADDRESS CORRECTIONS - as promptly as possible.
INSTRUCTION DEPARTMENT	Completed assignments, technical questions, "NEED HELP" forms, questions about shipments, transfers to resident training.
STUDENT SERVICES DEPARTMENT	School procedures, special scheduling and shipping arrangements, other special services questions, record transcripts (after graduation), shipments not received and placement referral service.
ACCOUNTING DEPARTMENT	Payments (use payment coupon, remittance slip and/or order form as appropriate), accounts, deposits, charges for overdue loan items.

MICROFICHE DEPARTMENT	Orders for manufacturer's parts and service manuals on microfiche.
PRESIDENT'S OFFICE	Suggestions, compliments or complaints—except when these are limited to a particular department, address them to the head of the department concerned.
RTS (RESIDENT TRAINING SERVICE) DEPARTMENT	Requests for information concerning repairs performed by advanced students in the resident training program.
INFORMATION SERVICES DEPARTMENT	Press release information. Area workshop information. Information about graduate options and other technical materials.
WHEN IN DOUBT	Address your correspondence to Information Services Department.
IN A HURRY?	Telephone for all departments: (303) 722-4603.
	Office hours: 7:00 to 4:30 Mountain Time Monday through Thursday.

TO DO OR NOT TO DO

Here is a reminder list of things you can DO or AVOID to help us give you the best service.

DO	DON'T
PUT YOUR STUDENT NUMBER ON ALL letters, papers, assignments, projects, remittance slips and other items you send us.	Don't put miscellaneous notes or letters inside packages unless clearly identifiable. They may be discarded with packing material.
Address all correspondence to the department concerned (see previous section).	Don't put miscellaneous correspondence in returned course material. Answers could be delayed.
Send notes or questions intended for different departments on separate slips of paper, with your name and student number on each. Mail is sorted and distributed at a central location, so correspondence requiring the attention of several departments should be sent so that it can be distributed simultaneously to all concerned. Otherwise you may expect delay in any action or reply needed.	Don't put questions intended for one department in your correspondence to another.
Send a 'NEED HELP'' form to your instructor if you are having trouble, before you return the assignment. Be sure your question is not answered in the text material first.	Don't hold completed assignments and return them in groups — this will cause delays in your next shipment.
Send coupons from the book that you will receive (if you use a time payment plan) with each tuition payment; send remittance slips (you receive a supply of those, too) with all other payments unless accompanied by a cash order. For proper credit fill in remittance slip carefully.	Don't send incomplete assignments. These cannot be processed or graded and will simply be set aside until the rest of the assignment arrives.
	Don't send more than one question on each ''NEED HELP'' form unless the questions are related to each other. Ask for more forms if necessary.
	Don't send a completed quiz unless you are fairly certain it is 80% correct and will receive a passing grade.
	Don't send in a practical project not properly completed — always do your best first.
	Don't send in a payment without an explanation of what it is for (remittance slip, coupon, order blank, etc.).

DEFINITIONS

Sometimes we become so accustomed to the terms that we use, we don't realize that these may not be as clear to new students as they are to us. Here are a few National Camera definitions to help orient you to the language we will be using in our written conversations with each other.

Student number	Your identification number for all departments. Your records are filed under this number. When you graduate, it remains your identification number in all communications you have with National Camera.
Account number	Your student number.
"NEED HELP" forms	Forms supplied by the Instruction Dept. to use in asking questions.
Remittance Slips	Forms supplied by the Accounting Dept. to use when sending in payments. Use with all payments except when sending a coupon with a tuition payment, or payment accompanying a cash order.
Coupon book	Coupons identified with your student number, send in booklet form if you have chosen a time payment plan. You return individual coupons with tuition payments.
Tuition account	The record of your tuition payments.
Deposit account	The record of your deposits covering the value of school property in your possession.
Open account	Your charge account for miscellaneous technical material.
Course shipment	A package including one or more course subjects, with texts, supplements, printed matter, tools, materials and practice equipment as appropriate.

Your course shipment has been scheduled	Instructions have been sent to the shipping department to send a particular shipment to you. Failure to have the correct deposit for school property in your deposit account will automatically result in a "hold" order on the scheduled shipment.
Quiz, written assignment	These terms are used interchangeably.
Practical assignment, practical exam	These terms are used interchangeably.
Keep tools	Those tools included in your course cost. Sent with the shipment which requires their use.
Practice equipment	Photo equipment, camera assemblies, etc. sent with course shipments, on which you perform work to be returned for grading. Not sold.
Course material	A term used to refer to other items (frequently expendable items) supplied with course shipments to enable you to complete the practical assignments.
Graduate option	A self-study course containing two or more lesson texts with self-test quizzes and answers. You study at your own pace and test yourself as you progress.
Microfiche	A 4″ x 6″ transparency containing up to 90 pages of a full size manufacturers parts and service manual. Contact the Microfiche Department for listing of available manuals.
RTS repair	A repair that is performed under the guidance of an instructor by an advanced student in the resident training program.
Workshops (Area Workshops)	Brief seminars held periodically across the U.S. covering specific products and/or subjects.

A FORWARD LOOK

For training to be effective it must be flexible enough to permit individual talent to develop and to help overcome individual weaknesses. In deciding what elements to stress, what to outline briefly, how fundamental or advanced certain technical explanations should be, we have relied heavily on past experience with students. We have aimed for a balanced program, directed always toward the sum of the goals discussed in this text.

This balance is certainly not perfect, nor can it be perfectly attuned to each individual. If you find some areas overly simple and others relatively complicated, remember that we depend on you to make the best use of your time and study material to reach your specific goal.

Now you are one of the thousands of students—and an important one—whose reactions will help direct our future efforts. This is another reason why you are encouraged throughout your training program to communicate individually with your instructors whenever you need help and whenever you have either favorable comment or constructive criticism concerning your course.

This school—any school—must be responsive to the reaction of its students if it expects to maintain the vitality and effectiveness of its educational program. Each individual reaction has its effect on the whole. National Camera will depend on you for help in achieving our mutual goals.